

-36-

CLAIMS:

1. A method of treating a surface of a food processing facility,
said surface having a first population of microorganisms disposed thereon,
5 comprising:
- (a) disposing (i) a biofilm containing a second population of
microorganisms and/or (ii) a second population of microorganisms capable of forming
a biofilm onto the surface of the food processing facility; and
- (b) inhibiting the growth of said first population of microorganisms
10 on said surface of said food processing facility with said second population of
microorganisms.
2. The method of claim 1, wherein:
said first population of said microorganisms includes *Listeria*
monocytogenes.
- 15 3. The method of claim 2, wherein:
said second population of microorganisms includes bacteria from the
genus *Enterococcus*.
4. The method of claim 3, wherein:
said *Enterococcus* bacteria includes *Enterococcus durans*.
- 20 5. The method of claim 2, wherein:
said second population of microorganisms includes bacteria from the
genus *Lactococcus*.
6. The method of claim 5, wherein:
said *Lactococcus* bacteria includes *Lactococcus lactis*.
- 25 7. The method of claim 3, wherein:
said second population microorganisms includes bacteria from the
genus *Lactobacillus*.
8. The method of claim 7, wherein:
said *Lactobacillus* bacteria includes *Lactobacillus plantarum*.
- 30 9. A method of inhibiting the growth of *Listeria monocytogenes*
on a surface of a food processing facility, comprising:

-37-

(a) inoculating said surface of said food processing facility with (i) a biofilm containing bacteria and/or (ii) bacteria capable of forming a biofilm on said surface of said food processing facility; and

(b) inhibiting the growth of said *Listeria monocytogenes* on said surface of said food processing facility with said bacteria.

10. The method of claim 9, wherein:
said bacteria includes *Enterococcus durans*.

11. The method of claim 9, wherein:
said bacteria includes *Lactococcus lactis*.

12. The method of claim 9, wherein:
said bacteria includes *Lactobacillus plantarum*.

13. The method of claim 9, wherein:
(b) includes inhibiting the growth of said *Listeria monocytogenes* on said surface of said food processing facility with said bacteria contained in said biofilm at a temperature ranging from about 4°C to about 37°C.

14. A method of inhibiting the growth of *Listeria monocytogenes* on a surface of a food processing facility, comprising:

(a) inoculating said surface of said food processing facility with a microorganism selected from the group consisting of bacteria from the genus *Enterococcus* and bacteria from the genus *Lactococcus*; and

(b) inhibiting the growth of said *Listeria monocytogenes* on said surface of said food processing facility with said bacteria.

15. A method of inhibiting the growth of *Listeria monocytogenes* on a surface of a food processing facility, comprising:

(a) inoculating said surface of said food processing facility with (i) bacteria contained in a biofilm and/or (ii) bacteria capable of forming a biofilm, wherein said bacteria are selected from the group consisting of *Enterococcus durans*, *Lactococcus lactis*, and *Lactobacillus plantarum*; and

(b) inhibiting the growth of said *Listeria monocytogenes* on said surface of said food processing facility with said bacteria.

16. The method of claim 15, wherein:

-38-

(b) includes inhibiting the growth of said *Listeria monocytogenes* on said surface of said food processing facility with said bacteria contained in said biofilm at a temperature ranging from about 4°C to about 37°C.

17. A kit for inhibiting the growth of a first microorganism population
5 disposed on a surface, comprising:

a biofilm; and

a second microorganism population disposed in said biofilm,

wherein said second microorganism population is inhibitory to said first microorganism population when said second microorganism population is placed
10 in the presence of said first microorganism population.

18. The kit of claim 17, wherein:

said first microorganism population includes *Listeria monocytogenes*,

and

said second microorganism population includes *Enterococcus durans*.

19. The kit of claim 17, wherein:

said first microorganism population includes *Listeria monocytogenes*,

and

said second microorganism population includes *Lactococcus lactis*.

20. The kit of claim 17, wherein:

said first microorganism population includes *Listeria monocytogenes*,

and

said second microorganism population includes *Lactobacillus plantarum*.

21. An inoculant composition, comprising:

25 a biofilm having disposed therein at least one of the following
Enterococcus durans having ATCC accession number PTA-4758, *Enterococcus durans* having ATCC accession number PTA-4759, *Lactococcus lactis* having ATCC accession number PTA-4760, *Lactococcus lactis* having ATCC accession number PTA-4761.

30 22. A biologically pure culture of bacteria which includes at least one of the following *Enterococcus durans* having ATCC accession number PTA-4758, *Enterococcus durans* having ATCC accession number PTA-4759, *Lactococcus*

-39-

lactis having ATCC accession number PTA-4760, *Lactococcus lactis* having ATCC accession number PTA-4761 and mixtures thereof disposed in a biofilm.

23. A kit for inhibiting the growth of a first microorganism population disposed on a surface, comprising:
5 a biofilm; and
a second microorganism population for disposing in said biofilm,
wherein said second microorganism population is inhibitory to said first microorganism population when said second microorganism population is placed in the presence of said first microorganism population.

10 24. The kit of claim 23, wherein:
said first microorganism population includes *Listeria monocytogenes*,
and
said second microorganism population includes *Enterococcus durans*.

15 25. The kit of claim 23, wherein:
said first microorganism population includes *Listeria monocytogenes*,
and
said second microorganism population includes *Lactococcus lactis*.

20 26. The kit of claim 23, wherein:
said first microorganism population includes *Listeria monocytogenes*,
and
said second microorganism population includes *Lactobacillus plantarum*.

25 27. A method for selecting bacteria which inhibit the growth of *Listeria monocytogenes*, comprising:
(a) isolating naturally-occurring bacteria from a food processing facility;
(b) culturing said isolated naturally-occurring bacteria; and
(c) testing said isolated naturally-occurring bacteria for the ability to inhibit the growth of *Listeria monocytogenes*.

30 28. The method of claim 27, wherein:
(a) includes isolating said naturally-occurring bacteria from a drain of said food processing facility.

-40-

29. A method of selecting inhibitory bacteria, comprising:
- (a) isolating naturally occurring bacteria populations from a food processing facility;
- (b) culturing said isolated naturally occurring bacteria populations;
- 5 and
- (c) testing each isolated naturally-occurring bacteria population for the ability to inhibit the growth of a microorganism, wherein isolated naturally-occurring bacteria populations having the ability to inhibit the growth of said microorganism are identified as a population of inhibitory bacteria.
- 10 30. A culture of microorganisms, comprising *Enterococcus durans* having ATCC accession number PTA-4758.
31. A culture of microorganisms, comprising *Enterococcus durans* having ATCC accession number PTA-4759.
32. A culture of microorganisms, comprising *Lactococcus lactis*
- 15 having ATCC accession number PTA-4760.
33. A culture of microorganisms, comprising *Lactococcus lactis* having ATCC accession number PTA-4761.
34. A method of treating a food product, said food product having a first population of microorganisms disposed thereon, comprising:
- 20 (a) disposing a second population of microorganisms onto said surface of said food product; and
- (b) inhibiting the growth of said first population of microorganisms on said food product with said second population of microorganisms.
- 25 35. The method of claim 34, wherein said second population microorganisms includes at least one of the following *Enterococcus durans* having ATCC accession number PTA-4758, *Enterococcus durans* having ATCC accession number PTA-4759, *Lactococcus lactis* having ATCC accession number PTA-4760, *Lactococcus lactis* having ATCC accession number PTA-4761.